

Lightning and Overvoltage Protection
ProTec T1 3+0 LH
 Class I • Class II • Type 1 • Type 2



Location of Use: Main Distribution Boards
 Network Systems: TN-C
 Mode of Protection: L-PEN
 IEC/EN Category: Class I+II / Type 1+2
 Housing: Pluggable Design
 Compliance: IEC 61643-11:2011
 EN 61643-11:2012+A11:2018

Technical Data

ProTec T1-xxx-3+0-LH(-R)

300

IEC Electrical

Nominal AC Voltage (50/60Hz)	U_o/U_n	240V
Maximum Continuous Operating Voltage (AC)	U_c	300V
Nominal Discharge Current (8/20 μ s)	I_n	20 kA
Maximum Discharge Current (8/20 μ s)	I_{max}	40 kA
Impulse Discharge Current (10/350 μ s)	I_{imp}	12.5 kA
Specific Energy	W/R	39 kJ/ Ω
Charge	Q	6.25 As
Voltage Protection Level	U_p	1500V
Response Time	t_A	< 25 ns
Overcurrent Protection (max)		160 A gG
Short-Circuit Current Rating (AC)	I_{SCCR}	50 kA
TOV Withstand 5s	U_T	337V
TOV 120min	U_T	442V
	mode	Safe Fail
Number of Ports		1

Additional Electrical Parameters (Tests performed within Raycap testing laboratory only)

Residual Voltage at 5 kA (8/20 μ s)	U_{res}	700V
Overcurrent Protection (min)		160 A gG

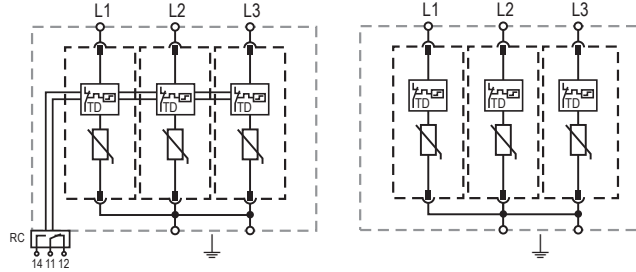
Mechanical & Environmental

Operating Temperature Range	T_a	-40 °F to +185 °F [-40 °C to +85 °C]
Permissible Operating Humidity	RH	5%...95%
Altitude (max)		13123 ft [4000m]
Terminal Screw Torque	M_{max}	40 lbf-in [4.5 Nm]
Conductor Cross Section (max)		2 AWG (Solid, Stranded) / 4 AWG (Flexible) 35 mm ² (Solid, Stranded) / 25 mm ² (Flexible)
Mounting		35 mm DIN Rail, EN 60715
Degree of Protection		IP 20 (built-in)
Housing Material		Thermoplastic: Extinguishing Degree UL 94 V-0
Thermal Protection		Yes
Operating State / Fault Indication		Green Flag / Not Green Flag
Remote Contacts (RC)		Optional
RC Switching Capacity		AC: 250V/1A, 125V/1A; DC: 48V/0.5A, 24V/0.5A, 12V/0.5A
RC Conductor Cross Section (max)		16 AWG (Solid) / 1.5 mm ² (Solid)

Internal Configuration

Legend

- L Line Conductor Terminal
- ⏏ PE Conductor Terminal
- RC Remote Contacts Terminal (Optional)
- TD Thermal Disconnect



ProTec T1-xxx-3+0-LH(-R)

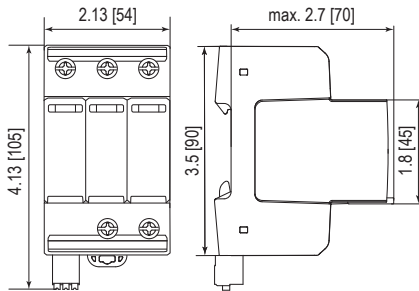
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Order Information

Order Code	300
ProTec T1-xxx-3+0-LH	59.A375
ProTec T1-xxx-3+0-LH-R (with remote contacts)	59.A376
ProTec T1-xxx-LH-P (plug)	59.A383

Dimensions & Packaging

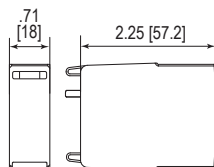
inches [mm]



Complete Unit

ProTec T1-xxx-3+0-LH		300
Weight	pounds	1.177
	grams	534
ProTec T1-xxx-3+0-LH-R		
Weight	pounds	1.190
	grams	540
DIN 43880 Dimension		3 TE / 2.13" [54]
Packaging Dimensions (HxWxL)		4.3 x 4.5 x 13.8" [109 x 115 x 352 mm]
Standard Order Quantity		5 Unit

Spare Plug



Single Unit

ProTec T1-xxx-LH-P		300
Weight	pounds	.255
	grams	116
DIN 43880 Dimension		1 TE / .71" [18]
Packaging Dimensions (HxWxL)		4.3 x 4.5 x 13.8" [109 x 116 x 352 mm]
Standard Order Quantity		24 Units